

2022 Edition

Amended October 4, 2022

CHAPTER 3 FLOODPLAIN MANAGEMENT

3-3-100 STATUTORY AUTHORIZATION

The Legislature of the State of Wyoming has in Wyoming Statute 18-5-201 et. seq. authorized Laramie County to regulate the use, condition of use or occupancy of lands in unincorporated Laramie County. Therefore, the Board of Commissioners of Laramie County, Wyoming does ordain as follows:

3-3-101 FINDINGS OF FACT

- a. The flood hazard areas of Laramie County, Wyoming are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.
- b. These flood loses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazards areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.

3-3-102 STATEMENT OF PURPOSE

- a. It is the purpose of these regulations to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:
 - Protect human life and health;
 - ii. Minimize expenditure of public money for costly flood control projects;
 - iii. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
 - iv. Minimize prolonged business interruptions;
 - v. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
 - vi. Help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize future flood blight areas;
 - vii. Ensure that potential buyers are notified that property is in a flood area; and,
 - viii. Ensure that those who occupy areas of special flood hazard assume responsibility for their actions.

3-3-103 METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purposes, these regulations use the following methods:

- a. Restrict or prohibit uses that are dangerous to health, safety or property in times of flood or cause excessive increases in flood heights or velocities;
- b. Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;

- c. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;
- d. Control filling, grading, dredging and other development that may increase flood damage;
- e. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

3-3-104 LANDS TO WHICH THESE REGULATIONS APPLY

These regulations shall apply to all areas of special flood hazard within the jurisdiction of Laramie County, Wyoming but does not include areas within incorporated municipalities.

3-3-105 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

- a. The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled "The Flood Insurance Study for Laramie County, Wyoming," dated January 17, 2007 with accompanying Flood Insurance Rate Maps (FIRM), and any revisions thereto, are hereby adopted by reference and declared to be a part of these regulations.
- b. Laramie County Floodplain Management Maps, a certain set of maps marked and designated by Laramie County, hereby referred to, adopted, and made a part hereof in these regulations. This set of maps depicts Areas of Special Flood Hazard based on engineering and technical data from various sources.
- c. The documents are on file available for inspection by the public.

3-3-106 ESTABLISHMENT OF FLOODPLAIN DEVELOPMENT PERMIT

- a. A Development Permit shall be required to ensure conformance with the provisions of these regulations. A Development Permit shall be obtained before construction or development begins within any Area of Special Flood Hazard as defined in Section 3-3-104.
- b. Application for a Development Permit shall be made in a format determined by the Floodplain Administrator. If a zoning certificate, address affidavit, plat, site plan, or construction plans are required by other regulations of Laramie County, the application for such approvals will constitute an application for a development permit, provided the application contains, as a minimum, the information described in this section. In cases where other permits or review is not otherwise required, a separate application for a development permit is required.

3-3-107 COMPLIANCE

a. No structure or land shall hereafter be located, altered, or have its use changed without full compliance with the terms of these regulations and other applicable regulations, including all currently adopted building codes.

3-3-108 ABROGATION AND GREATER RESTRICTIONS

a. These regulations are not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where these regulations and other regulations, easements, covenants, or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

3-3-109 INTERPRETATION

In the interpretation and application of these regulations, all provisions shall be:

- a. Considered as minimum requirements;
- b. Liberally construed in favor of the interpretation made by the governing body; and,
- c. Deemed neither to limit nor repeal any other powers granted under State statutes.

3-3-110 WARNING AND DISCLAIMER OR LIABILITY

The degree of flood protection required by these regulations is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. These regulations do not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. These regulations shall not create liability on the part of the community or any official or employee thereof for any flood damages that result from reliance on these regulations or any administrative decision lawfully made thereunder. Laramie County retains all applicable immunities, including but not limited to its governmental immunity provided by common law and W.S. § 1-39-101 et seq.

3-3-111 DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The Laramie County Director of Public Works is hereby appointed the Floodplain Administrator to administer and implement the provisions of these regulations and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management.

3-3-112 DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

Duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:

- a. Maintain and hold open for public inspection all records pertaining to the provisions of these regulations.
- b. Review permit applications to determine whether proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding.
- c. Review, approve or deny all applications for development permits required by adoption of these regulations.
- d. Review permits for proposed development to assure that all necessary permits have been obtained from those Federal, State or local governmental agencies.
- e. Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Administrator shall make the necessary interpretation.
- f. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

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- g. When base flood elevation data as defined in Section 3-3-104 has not been provided, the Floodplain Administrator shall obtain, review and reasonably use any base flood elevation data and floodway data available from a Federal, State or other source, in order to administer the provisions of Chapter 3.
- h. When a regulatory floodway has not been designated, the Floodplain Administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of thebase flood more than one foot at any point within the community.
- i. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one (1) foot, provided the community first applies for a conditional FIRM revision through FEMA (Conditional Letter of Map Revision). The Floodplain Administrator is authorized to require that those proposing such development prepare and submit all necessary documentation supporting such a revision.

3-3-113 FLOODPLAIN DEVELOPMENT PERMIT PROCEDURES

Application for a Development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard.

Additionally, the following is required:

- a. Elevation (in relation to mean sea level) of the lowest floor (including basement) of all new and substantially improved structures;
- b. Elevation in relation to mean sea level to which any nonresidential structure shall be flood proofed;
- c. An Elevation Certificate verifying that the nonresidential flood proofed structure shall meet the flood proofing criteria of 3-4-101(b).
- d. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.
- e. Maintain a record of all such information in accordance with 3-3-113(a).
 - i. Approval or denial of a Development Permit by the Floodplain Administrator shall be based on all of the provisions of these regulations and the following relevant factors:
 - ii. The danger to life and property due to flooding or erosion damage;
 - iii. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - iv. The danger that materials may be swept onto other lands to the injury of others;
 - v. The compatibility of the proposed use with existing and anticipated development;

- vi. The safety of access to the property in times of flood for ordinary and emergency vehicles:
- vii. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
- viii. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site;
- ix. The availability of alternative locations not subject to flooding or erosion damage for the proposed use.

3-3-114 FLOODPLAIN REGULATIONS VARIANCE PROCEDURES

- The Board (SWMRB) shall hear and render judgment on requests for variances from the requirements of these regulations.
- b. The Board (SWMRB) shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of these regulations.
- c. Any person or persons aggrieved by the decision of the Board (SWMRB) may appeal such decision in the courts of competent jurisdiction.
- d. The Floodplain Administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
- Variances may be issued for the reconstruction, rehabilitation or restoration of structures
 listed on the National Register of Historic Places or the State Inventory of Historic
 Places, without regard to the procedures set forth in the remainder of these Regulations.
- f. Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors of this Chapter have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- g. Upon consideration of the factors noted above and the intent of these regulations, the Board (SWMRB) may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of these regulations.
- h. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- i. Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- j. Prerequisites for granting variances:
 - i. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - ii. Variances shall only be issued upon:

- (A) Showing a good and sufficient cause;
- (B) A determination that failure to grant the variance would result in exceptional hardship to the applicant, and a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or regulations.
- iii. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- k. Variances may be issued for new construction and substantial improvements provided that:
 - i. The criteria outlined in Section 3-3-115 are met; and,
 - ii. The structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

3-3-115 CERTIFICATION OF IMPROVEMENTS IN THE FLOODPLAIN

a. Letter of Certification, stamped and signed by a Professional Licensed Surveyor or Engineer, shall be required after construction verifying improvements were built in conformance with the approved floodplain development permit.

END OF TITLE 3 - PUBLIC INFRASTRUCTURE
CHAPTER 3 FLOODPLAIN MANAGEMENT

CHAPTER 4 PROVISIONS FOR FLOOD HAZARD REDUCTION

3-4-100 GENERAL STANDARDS

In all areas of special flood hazards the following provisions are required for all new construction and substantial improvements:

- All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- b. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- c. All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
- d. All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- e. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- f. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters; and,
- g. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

3-4-101 SPECIFIC STANDARDS

The County shall not approve zoning certificates or certificates of compliance until the requirements of this section have been met. In all areas of special flood hazards where base flood elevation data has been provided the following provisions are required:

a. Residential Construction

New construction and substantial improvement of any residential or accessory structure shall have the lowest floor (including basement), elevated 1' foot or above the base flood elevation, also known as "free board". To accommodate the fill material required, Compensatory Storage is required for all properties within the zoned boundary. For all properties outside of the zoned boundary, Compensatory Storage is not required. An Elevation Certificate shall be submitted to the Floodplain Administrator certifying that the standard of this subsection as proposed in Section 3-3-114 is satisfied.

b. Nonresidential and Residential Accessory Structure Construction

New construction and substantial improvements of any commercial, industrial or other nonresidential building shall either have the lowest floor (including basement) elevated 1' foot or above the base flood elevation (also known as "free board") or, together with attendant utility and sanitary facilities, shall be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. To accommodate the fill material required, Compensatory Storage is required for all properties within the zoned boundary. For all properties outside of the zoned boundary, Compensatory Storage is not required. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification that includes the specific elevation (in relation to mean sea level) to which such structures are flood proofed shall be maintained by the Floodplain Administrator.

c. Enclosures

New construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

- i. A minimum of two openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
- ii. The bottom of all openings shall be no higher than one (1) foot above grade.
- iii. Openings may be equipped with screens, louvers, valves, or other coverings or devices, provided they permit the automatic entry and exit of floodwaters.

d. Manufactured Homes

The following requirements shall be met:

i. All manufactured homes must be placed within Zone A on a community's FIRM and shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable County anchoring requirements for resisting wind forces.

- ii. Manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community's FIRM must be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement. This requirement applies to manufactured homes placed on all of the following sites:
 - (A) Outside of a manufactured home park or subdivision,
 - (B) In a new manufactured home park or subdivision,
 - (C) In an expansion to an existing manufactured home park or subdivision; or,
 - (D) In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood.
- iii. All manufactured homes placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A1-30, AH and AE on the community's FIRM that are not subject to the provisions of this section shall be elevated so that either:
 - (A) The lowest floor of the manufactured home is at or above the base flood elevation; or,
 - (B) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- e. Recreational Vehicles

Recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community's FIRM must:

- i. Be on the site for fewer than 180 consecutive days; OR
- ii. Be fully licensed and ready for highway use; or
- iii. Meet the permit requirements of 3-4-101d. and the elevation and anchoring requirements for manufactured homes.

A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

f. Below-grade Residential Crawl Space Construction

New Construction and substantial improvement of any below-grade crawl space shall meet the following minimum provisions:

i. An interior grade elevation that is below base flood elevation no lower than two (2) feet below the lowest exterior adjacent grade.

- ii. A height of the below-grade crawl space, measured from the interior grade of the crawl space to the top of the foundation wall, no higher than four (4) feet at any point.
- iii. An adequate drainage system that allows floodwaters to drain from the interior area of the crawl space following a flood.
- iv. Anchorage sufficient to prevent floatation, collapse, or lateral movement of the structure and resist the hydrostatic and hydrodynamic loads.
- v. Construction materials and utility equipment resistant to flood damage.
- vi. Constructed with methods and practices that minimize flood damage.
- vii. Constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within components during conditions of flooding.
- viii. A design which automatically equalizes hydrostatic flood forces onexterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a Wyoming registered professional engineer, or must meet or exceed the following minimum criteria:
 - (A) A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
 - (B) The bottom of all openings shall be no higher than one (1) foot above the lowest adjacent exterior grade.
 - (C) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

3-4-102 STANDARDS FOR SUBDIVISION PROPOSALS

- All proposals for the development of subdivisions shall meet Development Permit requirements of 3-3-107, 3-3-114; and the provisions of Chapter 4 of these regulations.
- b. Evidence that base flood elevation data has been gathered in accordance with County Floodplain regulations shall be provided with subdivision proposals and other proposed development, including the placement of subdivisions greater than fifty (50) lots or five (5) acres, whichever is lesser, if not otherwise provided pursuant to Section 3-3-106 or 3-3-113(h).
- c. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
- d. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

3-4-103 STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES)

Located within the areas of special flood hazard established in Section 3-1-102 are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and velocity flow may be evident. Such flooding is characterized by ponding or sheet flow, therefore, the following provisions apply:

- a. All new construction and substantial improvements of residential structures must have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two (2) feet if no depth number is specified).
- b. All new construction and substantial improvements of nonresidential structures shall have the following:
 - i. The lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two (2) feet if no depth number is specified); or,
 - ii. Together with attendant utility and sanitary facilities a design such that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.
- c. A registered professional engineer or architect shall submit an Elevation Certificate to the Floodplain Administrator that the standards in this subsection as proposed in Section 3-3-114 are satisfied.
- d. Require within Zones AH or AO adequate drainage paths around structures on slopes, to guide flood waters around and away from proposed structures.

3-4-104 FLOODWAYS

Floodways are located within areas of special flood hazard established in Section 3-1-102. Since the floodway is an extremely hazardous area due to the velocity of floodwaters that carry debris, potential projectiles and erosion potential, the following provisions shall apply:

- a. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
- b. If the provisions above are satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions.
- c. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided the community first applies for a conditional FIRM and floodway revision through FEMA.

d. The regulatory floodway is included in Areas of Special Flood Hazard. Therefore, in addition to the restrictions in this chapter, all provisions of these regulations that apply to Areas of Special Flood Hazard also apply to the regulatory floodway.

END OF TITLE 3 - PUBLIC INFRASTRUCTURE
CHAPTER 4 PROVISIONS FOR FLOOD HAZARD REDUCTION